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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/530,611

04/07/2005

Atsushi Nojiri

ARGM-108US

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23122 7590 04/11/2008  
RATNERPRESTIA  
P O BOX 980  
VALLEY FORGE, PA 19482-0980

EXAMINER

CHOWDHURY, AFROZA Y

ART UNIT

PAPER NUMBER

2629

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/530,611	<b>Applicant(s)</b> NOJIRI ET AL.	
	<b>Examiner</b> AFROZA Y. CHOWDHURY	<b>Art Unit</b> 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 18-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/1/2008</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's amendment received on **February 21, 2008** has been entered. Claims 2-17 are cancelled. Claims 1 and 18-19 are currently pending. Applicant's newly added claims are addressed herein below.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claim 1, 20, and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, lines 5-10, "... **(a) each of a plurality of display apparatuses at a lower resolution when the predetermined number of display apparatuses is a plurality of display apparatuses, the lower resolution being lower than the original resolution, or (b) one display apparatus at the original resolution when the predetermined number of display apparatuses is one display apparatus...**" is not clear. What is an original resolution?

Regarding claim 1, lines 11-15, “... **the image data includes a plurality of layers, at least one layer of the plurality of layers is provided to a first display apparatus of the plurality of display apparatuses, and at least one further layer of the plurality of layers is provided to a further display apparatus of the plurality of display apparatuses**” is not clear. Which one is a “first display”? Is “first display” corresponds to any display of a plurality of display apparatuses? Which one is a “further display” is not understood. Is “further display” corresponds to a “second display” of the plurality of display devices? The term “further display” is not consistent with the rest of the claim.

Claims 20 and 21 are rejected the same as claim 1 above.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Yoshioka** (US Patent 6351705) in view of **Shiuan et al.** (US Pub. 2004/0075622).

As to claim 1, Yoshioka discloses a display controlling apparatus, being connectable to a predetermined number of display apparatuses (fig.1(2, 3), col. 3, lines 45-48), comprising:

a single video memory (fig. 1(10) for storing data at an original resolution (col. 3, lines 42-45, col. 5, lines 16-32); and

a controlling unit (fig. 1(4)) outputting the image data from said the single video memory to each of the plurality of display apparatuses (col. 3, lines 34-44).

Yoshioka does not explicitly teach a display controlling apparatus where (a) each of a plurality of display apparatuses at a lower resolution when the predetermined number of display apparatuses is a plurality of display apparatuses, the lower resolution being lower than the original resolution, (b) one display apparatus at the original resolution when the predetermined number of display apparatuses is one display apparatus.

Shiuan et al. teaches a dual display computer system (fig. 1-4) where one display is running in a high-resolution mode and other display is running in a lower resolution mode (page 3, [0030]) or both in lower resolution mode (page 2, [0015]).

Therefore, it is obvious to one skill in the art at the time of the invention was made to combine the dual display computer system of Shiuan et al. with Yoshioka's navigation system to make a display controlling apparatus where the output contents to be displayed at a desired resolution.

Yoshioka (as modified by Shiuan) does not specifically teach a display controlling apparatus wherein, the image data includes a plurality of layers, at least one layer of the

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plurality of layers is provided to a first display apparatus of the plurality of display apparatuses, and at least one further layer of the plurality of layers is provided to a further display apparatus of the plurality of display apparatuses.

However, it is obvious to one skill in the art that the image data of Yoshioka (as modified by Shiuan) includes a plurality of layers, at least one layer of the plurality of layers is provided to a first display apparatus of the plurality of display apparatuses, and at least one further layer of the plurality of layers is provided to a further display apparatus of the plurality of display apparatuses.

As to claim 18, Yoshioka (as modified by Shiuan et al.) teaches a display controlling apparatus, being connectable to a plurality of display apparatuses (fig.1(2, 3), col. 3, lines 45-48).

Yoshioka (as modified by Shiuan et al.) does not specifically teach a display controlling apparatus wherein the lower resolution depends on the predetermined number of display apparatuses.

However, it is obvious for a display controlling apparatus wherein the lower resolution depends on how many of the display apparatuses.

As to claim 19, Yoshioka (as modified by Shiuan et al.) teaches a display controlling apparatus, being connectable to a plurality of display apparatuses (fig.1(2, 3), col. 3, lines 45-48).

Yoshioka (as modified by Shiuan et al.) does not a display controlling apparatus wherein the lower resolution is inversely proportional to the predetermined number of display apparatuses.

However, it is an obvious design choice to make a display controlling apparatus wherein the lower resolution is inversely proportional to the number of display apparatuses.

Claims 20 and 21 are rejected the same as claim 1 above.

### ***Response to Arguments***

6. Applicant's arguments filed **February 21, 2008** have been fully considered but they are not persuasive.

In the 2<sup>nd</sup> page of Remarks (last two lines), Applicant argues that Yoshioka does not disclose image data layers of any kind. The Examiner respectfully disagrees with this assertion. It is obvious to one skill in the art that any image data includes a plurality of layers. Hence, the image data of Yoshioka (as modified by Shiuan) includes a plurality of layers, at least one layer of the plurality of layers is provided to a first display apparatus of the plurality of display apparatuses, and at least one further layer of the plurality of layers is provided to a further display apparatus of the plurality of display apparatuses.

In the 3<sup>rd</sup> page of Remarks (2<sup>nd</sup> paragraph), Applicant states, “Shiuan et al. does not ...the devices to run in both modes by providing one layer to the first display device and a further layer to the second display device.” The examiner again respectfully disagrees. This newly added limitation, “the second display device” was never claimed. However, it is obvious for the display apparatuses of Yoshioka (as modified by Shiuan) to provide one layer to the first display device and a further layer to the second display device.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AFROZA Y. CHOWDHURY whose telephone number is (571)270-1543. The examiner can normally be reached on 7:30-5:00 EST, 5/4/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AC

4/9/2008

/Bipin Shalwala/

Supervisory Patent Examiner, Art Unit 2629